

## **PRELIMINARY GEOTECHNICAL ASSESSMENT:**

### **26 Alexander Street, Collaroy**

<b>1.0</b>	<b>LANDSLIP RISK CLASS</b> ( <i>Highlight indicates Landslip Risk Class of property</i> )
<input type="checkbox"/>	<i>A - Geotechnical Report not normally required</i>
<input type="checkbox"/>	<i>B - Geotechnical Engineer (Under Council Guidelines) to decide if Geotechnical Report is required</i>
<input type="checkbox"/>	<i>C - Geotechnical Report is required</i>
<input checked="" type="checkbox"/>	<i>D - Geotechnical Engineer (Under Council Guidelines) to decide if Geotechnical Report is required</i>
<input type="checkbox"/>	<i>E - Geotechnical Report required</i>

## **2.0 Proposed Development**

- 2.1** Demolish a large portion of the existing house and rebuild it.
- 2.2** Install a pool on the downhill side of the property by excavating to a maximum depth of ~0.8m.
- 2.3** Various other minor internal and external alterations and additions.
- 2.4** A fill to a maximum height of ~1.0m is required to create a level lawn area on the uphill side of the property.
- 2.5** Details of the proposed development are shown on 40 drawings prepared by Andy's Home Design, project number 26AHD0723, drawing numbered DA101 to DA107, DA201 to DA204, DA301 to DA305, DA400 to DA402, DA500 to DA508, and DA605 to DA620, dated 5.3.24.

## **3.0 Site Location**

- 3.1** The site was inspected on the 29<sup>th</sup> September, 2023.

**3.2** This residential property is on the low side of the road and has a SE aspect. The block runs longways to the south so there is a crossfall. It is located on the gently graded lower-middle reaches of a hillslope. The Sydney 1:100 000 Geological Sheet indicates the site is underlain by the Newport Formation of the Narrabeen Group. This is described as interbedded laminite, shale, and quartz to lithic quartz sandstone. The natural surface of the block has been altered by a cut for the house. The proposed development will require a ~0.8m excavation for the proposed pool and a ~1.0m fill for the level lawn areas.

**3.3** The site shows no indications of historical movement in the natural surface that could have occurred since the property was developed. We are aware of no history of instability on the property.

## **4.0 Site Description**

The natural slope falls across the property at an average angle of ~6°. At the road frontage, a concrete driveway runs down the slope to a garage attached to the E side of the house. In between the road frontage and the house is a terraced lawn area. The fills for the level lawn area are supported by stable brick retaining walls reaching up to ~0.8m in height. The two-storey brick house is supported on external brick walls. The external brick walls show no significant signs of movement. Access to the foundation space of the house was unavailable at the time of inspection. A cut to create the level platform for the house is supported by a stable ~1.2m high brick retaining wall that runs along the W common boundary. A gently sloping lawn area extends off the downhill side of the house to the lower common boundary. No significant signs of movement associated with slope instability were observed on the grounds. No cliffs or large rock faces were observed on the property or in the near vicinity. No geotechnical hazards that could impact on the subject property were observed on the surrounding neighbouring properties as viewed from the subject property and the street.

## 5.0 Recommendations

The proposed development and site conditions were considered and applied to the current council requirements. See the required inspection below that is to be carried out during construction and is a requirement for the final geotechnical certification. Apart from the inspection, it is not expected additional geotechnical input will be required provided good design and building practices are followed.

## 6.0 Inspection

The client and builder are to familiarise themselves with the following required inspection as well as council geotechnical policy. We cannot provide geotechnical certification for the owners or the regulating authorities if the following inspection has not been carried out during the construction process.

- All footings are to be inspected and approved by the geotechnical consultant while the excavation equipment and contractors are still onsite and before steel reinforcing is placed or concrete is poured.

White Geotechnical Group Pty Ltd.



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## Information about your Preliminary Assessment

This Preliminary Assessment relies on visual observations of the surface features observed during the site inspection. Where reference is made to subsurface features (e.g., the depth to rock) these are interpretations based on the surface features present and previous experience in the area. No ground testing was conducted as part of this assessment and it is possible subsurface conditions will vary from those interpreted in the assessment.

In some cases, we will recommend no further geotechnical assessment is necessary despite the presence of existing fill or a rock face on the property that exceed the heights that would normally trigger a full geotechnical report, according to the Preliminary Assessment Flow Chart. Where this is the case, if it is an existing fill, it is either supported by a retaining wall that we consider stable, or is battered at a stable angle and situated in a suitable position on the slope. If it is a rock face that exceeds the flow chart limit height, the face has been deemed to be competent rock that is considered stable. These judgements are backed by the inspection of over 5000 properties on Geotechnical related matters.

The proposed excavation heights referred to in section 2.0 of this assessment are estimated by review of the plans we have been given for the job. Although we make every reasonable effort to provide accurate information excavation heights should be checked by the owner or person lodging the DA. If the excavation heights referred to in in section 2.0 of this assessment are incorrect, we are to be informed immediately and before this assessment is lodged with the DA.

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